

**Applicant:** Kim et al.  
**Application No.:** 10/071,917

**REMARKS**

Claims 1-4, 13 and 14 are currently pending in this application. The Examiner has rejected Claims 1-4, 13 and 14 under 35 U.S.C. §103.

The Applicants canceled claims 5-12 and 15-18 without prejudice in a previous reply.

The Applicants believe that the Examiner making the present office action a final office action is improper. The Applicants amendments did not in any way necessitate the new grounds of rejection as they were merely directed to addressing issues regarding antecedent basis that were raised by the Examiner in the previous office action. Additionally, the Applicants' canceled claims 5-12 and 15-18 which had no bearing on the new grounds of rejection.

Accordingly, the Applicants respectfully request withdrawal of the finality of the present office action and consideration and entry of the present reply.

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**Double Patenting – Obviousness-type**

The Examiner rejected claims 1-18 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of various copending Applications.

The Applicants are willing to submit a terminal disclaimer to overcome the rejections over the claims of the Applications the Examiner cited, if the Examiner believes the Application is otherwise allowable.

**35 U.S.C. §103(a) – Claims 1-4, 13 and 14**

The Examiner rejected claims 1-4, 13 and 14 as being unpatentable over by Dabak et al. (U.S. Ref. No. 6,775,260) in view of Rowitch et al. (U.S. Ref. No. 6,628,702).

As the Examiner agrees, the Dabak et al. reference does not disclose, teach, nor suggest anywhere the use of different channelization codes. Indeed, in figure 2, the Dabak discloses, *inter alia*, encoded symbols  $D_1^1$  and  $D_2^1$  undergoing the *same* "user specific code"  $C^1$ . There is no teaching that any different channelization code is used on the symbols in the Dabak reference. And notably, there is no teaching in the Dabak reference of "each channelization code being uniquely associated with one of a first and second antennas".

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The Rowitch reference merely makes a vague reference in the background section relating to "covering the data for each antenna with a particular channelization code," but does not disclose, teach or suggest that the particular code is different for each antenna or uniquely associated with each antenna. Indeed, the Dabak reference itself discloses a "particular" user specific code. However, it is the *same* code, not a different code, and particularly not a different code that is uniquely associated with each antenna, as the Examiner agrees. Therefore, the Rowitch reference fails to cure the deficiencies of the Dabak reference.

Applicants' previously presented independent claim 1, on the other hand, recites:

A method for a user equipment (UE) to transmit a data field of symbols comprising the steps of:

generating a first data field of symbols;

encoding said first data field producing a second data field having complex conjugates of the symbols of said first data field;

spreading said first and second data fields, wherein said first data field is spread using a first channelization code and said second data field is spread using a second channelization code, each channelization code being uniquely associated with one of a first and second antennas; and

transmitting an RF signal including said first and second spread data fields over a first and second antenna.

which is neither disclosed, taught nor suggested in the Dabak et al. reference or the Rowitch et al. reference. Accordingly, the Applicants' previously presented

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independent claim 1 is patentable over the Dabak and Rowitch references, whether taken alone or in combination with each other.

The Applicants' claims 2-4 depend, either directly or indirectly, from Applicants' patentable independent claim 1. Therefore, Applicants' dependent claims 2-4 are patentable for at least the same reasons as Applicants' patentable independent claim 1.

Applicants' previously presented independent claim 13 recites:

A method for a user equipment (UE) to transmit a data field of symbols including a transmitter, the method comprising the steps of:

generating a first data field of symbols;

spreading said first data field using a first channelization code producing a first spread data field;

spreading said first data field using a second channelization code producing a second spread data field, each channelization code being uniquely associated with one of a first and second antennas; and

transmitting an RF signal including said first and second spread data fields over a first and second antenna.

which is neither disclosed, taught nor suggested in the Dabak et al. reference or the Rowitch et al. reference. Accordingly, the Applicants' previously presented independent claim 13 is patentable over the Dabak and Rowitch references, whether taken alone or in combination with each other.

Additionally, claim 14 depends from Applicants' patentable independent claim 13, and is therefore patentable for at least the same reasons as Applicants' patentable independent claim 13.

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**Conclusion**

The Applicants thank the Examiner for his consideration and believe the application is in condition for allowance. Early and favorable reconsideration is respectfully solicited. Additionally, the Applicants' again state that they believe the present Office Action should be a Non-Final Office Action and have responded accordingly.

If the Examiner has any questions, or believes that a telephone conference would advance the prosecution of this application, the Examiner is requested to contact the Applicants' undersigned attorney.

Respectfully submitted,

Kim et al.

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